



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/748,943

12/29/2003

Neil Keegstra

1122-8

7887

23869

7590

07/27/2006

HOFFMANN & BARON, LLP
6900 JERICHO TURNPIKE
SYOSSET, NY 11791

EXAMINER

RADI, JOHN A

ART UNIT

PAPER NUMBER

3641

DATE MAILED: 07/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary**Application No.**

10/748,943

Applicant(s)

KEEGSTRA ET AL.

Examiner

John A. Radi

Art Unit

3641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-7 and 9-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-7 and 9-12 is/are rejected.
- 7) ☒ Claim(s) 7 and 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "convex hull" of claim 7 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. Furthermore, in claim 10, the claim is drawn to a sabot positioned between said wad and slug, if the applicant is referring to a separate structure from the wad 14' shown in figures 2-4 or referred to in the specifications, such is not shown in any drawing nor supported by the specification.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

Art Unit: 3641

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 7 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification refers to hull as being the shotgun casing and not the projectile itself, therefore the addition to claim 7 of a "convex" hull is not supported by the diagrams or the specification.

Claim 10 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification refers to a "sabot positioned between said wad and said slug" which is not supported by the diagrams or the specification (in so far as a wad separate from a sabot), instead what is shown and taught by the specifications/drawings is a combination wad/sabot structure.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 3 rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi (US 4043267), and further in view of Amick (US 3527880).

Hayashi teaches a munition comprising: a projectile having a cylindrical body (27), forward end including a protruding convex member, increasing weight forward, including a hollow cylindrical bore (27') extending from rearward end wherein the cylindrical body (27) is solid to forward end. Hayashi doesn't teach wherein the projectile is a hardness less than metallic rounds. Amick and Hayashi are in the same field of invention, being ammunition design, and Amick teaches that it is well known in the art to select a material for the projectile with a hardness less than metal (rubber) when desired to create a non-lethal projectile so that the projectile may deform on impact and thereby distribute the kinetic energy without penetration (Amick, col 3 line 62).

With respect to claim 3, said munition (27) is domed shaped.

With respect to claims 5 and 6, wherein the body is formed of rubber or a durometer hardness of 20 to 90, see above with respect to Amick which teaches using rubber or soft material for non-lethal applications.

With respect to claim 7, tubular hull forward end (27) (see above with respect to the claimed "hull", base enclosing rearward end (Hayashi, A and B), propellant within base (X), a wad positioned between propellant and hull (1, fig 3a), projectile slug (27) generally cylindrical with a hollow bore extending from rearward end (fig 3b), further including a solid head (forward of said bore) which increases weight of slug to forward end. With respect to durometer hardness, see above discussion with respect to claim 1 and the selection of appropriate materials for selected application.

With respect to claim 10, further including a sabot positioned between wad and said slug, figures 10 and 14 of Hayashi show a sabot/wad combination of the same sort as taught by applicant in figures 2-4. If applicant is claiming a separate sabot from the wad, such is not disclosed or supported by the specification or drawings and is rejected above.

With respect to claims 11 and 12, wherein the slug is molded from rubber or has a durometer hardness of 20 to 90, see above discussion with respect to claim 1.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi in view of Amick as applied to claim 1 above, and further in view of Morgan (US 3062145). The Hayashi/Amick combination teaches the invention as described above with respect to claim 1 but doesn't mention a rim around the nose of the projectile. Morgan and Hayashi are in the same field of endeavor, shotgun shells and projectiles,

Art Unit: 3641

and Morgan teaches a rim (38) the motivation to combine would be to unroll the crimp uniformly as the projectile is fired (col 3 lines 60-65). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to include a rim around the nose of the projectile of Hayashi to help unfurl the crimp as the projectile is fired from the cartridge.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi in view of Amick as applied to claim 7 above, and further in view of Gibson (US 6615739). The Hayashi/Amick combination teaches the invention as described above with respect to claim 7 but doesn't mention dimples on the surface of the slug. Hayashi and Gibson are in the same field of endeavor, projectiles and cartridge shells, and Gibson teaches putting dimples on the surface of the projectile (fig 8) the motivation for doing so to increase projectile accuracy and distance (col 17, lines 1-5). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to include dimples on the surface of a projectile taught by the Hayashi/Amick combination to increase accuracy, distance or both.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See attached PTO-892 for a complete listing of prior art.

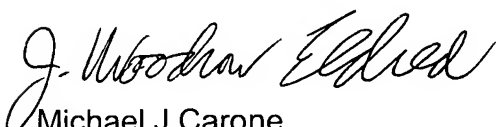
Any inquiry concerning this communication or earlier communications from the examiner should be directed to John A. Radi whose telephone number is 571-272-5883. The examiner can normally be reached on M-F 8-5.

Art Unit: 3641

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J. Carone can be reached on 571-272-6873. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

John A Radi
Patent Examiner
Art Unit 3641


Michael J Carone
for Supervisory Patent Examiner
Art Unit 3641